



# The **Integration** Effect

BUILDING MOMENTUM

# Natural Capital

Aligned to SDGs



At Biocon Biologics, we are integrating responsible and sustainable business practices in our day-to-day operations to create a better tomorrow for people and the planet.

As we expand our commercial footprint across the world and pursue new growth opportunities, post-integration of Viatrix' global Biosimilars business, we are working towards aligning our environmental practices with the good practices in the countries where we operate.

Through our efficient management of energy, waste, water, and biodiversity, we aim to make sustainable utilization of resources and minimize environmental impact. In FY24, our key initiatives included implementation of energy-efficient systems such as aerodynamic cooling tower fans and rooftop solar panels, implementation of re-usable technology and solvent recovery processes to reduce waste, and a water audit and risk assessment to help conserve freshwater at our manufacturing units.

Key Highlights



Environment Management & Governance

Biocon Group’s Environment, Occupational Health, Safety & Sustainability (EHSS) policy guides our environmental actions. The CSR and ESG Board Committee oversees the EHSS Policy and management of environmental initiatives. A team of dedicated EHS specialists is accountable for designing and implementing day-to-day operations. Regular audits ensure that preventive maintenance aligns with best practices, resulting in increased efficiency. Trainings for relevant teams and functions are carried out by both internal and external EHS experts.

Climate Strategy

Our climate strategy is guided by a decarbonization plan with the key pathways being a shift to renewable resources, operational efficiencies and effective emissions management.

Climate Risk Assessment

To effectively manage climate risks, Biocon and Biocon Biologics Limited are adopting the TCFD (Task Force on Climate-Related Financial Disclosures) framework. Through comprehensive Scenario Analysis, we have identified physical risks (weather events, supply chain disruptions, etc.) and transition risks (changing regulations, legal

requirements, etc.), and will take actions to mitigate them.

Ratings on Climate-Related Disclosures and Performance

Biocon, including Biocon Biologics, has received a rating of ‘B’ for climate change, and ‘C’ for water security from the Carbon Disclosure Project (CDP) in 2023.

Climate-Related Incentives

Our variable incentive structure includes sustainability-related objectives with a significant weightage for department-specific goals.

Energy Management

In FY24, our manufacturing sites were re-certified for Environment Management System, under the ISO 14001: 2015 standard requirements. We are preparing to get ISO 50001 certification and are in the process of developing an energy management policy, as a part of the certification.

Three-Pronged Approach to Energy Management		
Approach	Key Pathways / Initiatives	Impact
Energy-efficient systems	Aerodynamic cooling tower fans	GHG savings of ~890 tCO <sub>2</sub> e
	Motion sensor-equipped lights	
	Centralized chilled water system in two of our mAbs manufacturing facilities	
	Optimized relative humidity control process without hot water usage	
	Optimized compressed air distribution system	
	Replaced half of Compact Fluorescent Lamps (CFL bulbs) with Light-Emitting Diode (LED) bulbs and installed motion sensor lighting in common spaces at the Malaysia facility	
	Installed energy-efficient axial flow fans at the Malaysia facility	
Shift to renewable source of energy	Rooftop solar panels at the Malaysia facility	~20 tCO <sub>2</sub> e annually
Alternate transportation options	Transitioned to sea-based freight	1,130 tCO <sub>2</sub> e annually

For our India operations, 85% of the electricity requirements are sourced from renewable sources, and if we include our Malaysia operations, this stands at 46%. Our energy saving initiatives have contributed to the reduction of our Scope 1 and 2 emissions by 9% this year. We are currently in the process of setting mid-term targets for Scope 1 and 2 emissions, based on a scenario analysis conducted.

Category	FY24 (tCO <sub>2</sub> e)	FY23 (tCO <sub>2</sub> e)
Scope 1 Emissions	8,491	8,256
Scope 2 Emissions	78,721	87,936
Total Emissions (Scope 1 & 2)	87,212	96,192

Biocon Biologics initiated its Scope 3 Emissions accounting with the baseline year as FY23, and the value has been calculated as 156,387 tCO<sub>2</sub>e for FY23.

### Rooftop Solar Power Project, Malaysia

We have completed installation of solar panels for our Drug Substance, and Research and Development facilities, as per plan. The panels are expected to generate more than 1,000 kWp of renewable energy. This marks the completion of Phase 2 of our Rooftop Solar Project. In Phase 1, rooftop panels were commissioned at the Central Utilities Facility, which led to the generation of more than 386 KWp of renewable energy. The initiative has the potential to reduce our overall cost per unit of energy by 15%, and offset ~1.6 tCO<sub>2</sub>e emissions every month, once active and utilized to its full capacity.



### Waste Management

In FY24, we handed over 65 Tons of waste to authorized recyclers. We have onboarded specialized agencies that support us in implementing integrated waste management practices.

The following initiatives are part of our circular economy strategy:

#### Implementation of re-usable technology to replace disposable shrink wrapping

**at warehouses:** With the reduction of over 5,000 kg (80%) of plastic wrapping consumption annually at our warehouses by replacing it with CAM Buckle Pallet Strap (Belts), we are able to avoid over 3 tCO<sub>2</sub>e annually. The tested practices will be replicated in India from 2025 onwards.

**Solvent recovery processes:** In our Malaysia facility, we are able to recover about 1,500 MT of Acetonitrile with 99% purity. This means we do not need a new

batch of solvent, which helps us offset about 0.9 tCO<sub>2</sub>e annually.

Apart from these two initiatives, we carried out optimizations of our effluent treatment plant and recycled paper waste through authorized recyclers.

We comply with the amended 'Plastic Waste Management Rules' of the Central Pollution Control Board (CPCB), including Extended Producer Responsibility (EPR).

### Reducing Environmental Impact of our Products with Environment-Friendly Reusable Insulin Pens

We have been manufacturing reusable insulin pens since 2011. These pens are cheaper than their disposable counterparts, and they also lead to waste reduction. We are actively looking to increase the share of these reusable pens in all our markets apart from India, where they already account for more than 40% of the total pens supplied.





Water Management

In FY24, our efforts towards water management in our facilities in India were guided by an internal water audit and risk assessment. The findings of the assessment helped us conserve 100 KLD of freshwater within our manufacturing processes.

In our Malaysia facility, implementing Scaleban technology has helped us achieve a recycle rate of almost 500m<sup>3</sup>

of water per day, significantly reducing freshwater intake. We are piloting a rainwater harvesting system with a harvesting capacity of 1,000 liters of rainwater. We are planning to expand the capacity to 25,000 liters.

We had set targets for water recycling as a part of our Sustainability Linked Loan (SLL), and we are proud to state that in both the current and previous financial year, we have surpassed the targets.

Water Recycled (in KLD)

Year	Target	Achieved
FY24 (2023-24)	1,000	1,419
FY23 (2022-23)	900	941

Air Quality Management

We have installed an Ambient Air Quality Monitoring System (AAQMS) at Biocon's Special Economic Zone Area, which captures air quality data around a 5km radius of the facility. The data is fed into Karnataka State Pollution Control Board's (KSPCB) website, enabling real-time monitoring. To ensure workplace hygiene, we conduct thorough indoor air quality checks every six months. For continuous monitoring, we use EVM (Environmental Monitor) to measure various factors, including particulate sampling, volatile organic compounds, dust and average temperature.

Biodiversity Management

Our commitment and efforts towards biodiversity and land conservation are rooted in our Biodiversity and No Deforestation Policy. Provisions under the policy are implemented and monitored by our CSR and ESG teams in collaboration with other related departments. We conducted an Impact Assessment internally to identify the adverse impact of our operations on the surrounding ecosystem. The study also helped us inventorize the surrounding flora and fauna. The results of the assessment will help us finalize the level of commitment needed towards conservation.

We have continued our efforts towards afforestation and plastic-free initiatives, which are largely driven by our employees. Some of these include:

**Bengaluru Plantation Drive:** Planted 5,000+ saplings in Bengaluru.

**Malaysia Biologics Woodlands Project:** Planted 1,000+ trees in collaboration with local authorities, within and outside the Biocon Malaysia premises.

**Be Plastic-Free:** Beach clean-up and waste plastic collection campaign in Malaysia.

**Malaysia Green Initiative:** Distributed 250+ saplings to employees in Malaysia to promote accountability towards positive environmental action and raise awareness. Our employees also undertook lake cleaning under this initiative.

**Combating Water Pollution in Rivers:** Deployed 5,000+ mud balls in a river in Malaysia to combat water pollution. These balls, made of clay, organic materials, and microorganisms, help decompose waste, improve water quality, reduce odors, and stabilize pH levels.



Beach clean-up campaign in Malaysia

Product Life Cycle Assessments

During the financial year, we undertook 'Gate to Gate' Life Cycle Assessments for two of our commercial products using

the SimaPro software. We are working towards increasing the scope and extent of assessments to more of our products in the following years. The R&D team is closely associated in this process and

studies the outcomes of the assessment. This ensures integration of sustainability considerations right from the product development stage.